
Sequence Listing could not be accepted due to errors.

See attached Validation Report.

If you need help call the Patent Electronic Business Center at (866)

217-9197 (toll free).

Reviewer: Anne Corrigan

Timestamp: Mon Jun 25 15:28:53 EDT 2007

Reviewer Comments:

<210> 10

<211> 12

<212> PRT

<213> Homo sapiens

<220>

<221> MISC_FEATURE

<222> (1)..(12)

<223> hnRNP B1 is defined as a human hnRNP core protein.

Correspond to amino acids 3 - 14 of hnRNP B2.

<400> 10

Lys Thr Leu Glu Thr Val Pro Leu Glu Arg Lys Lys

1 5 10

Although the <160> response is "4," 10 sequences are shown in the submitted file. See above. Also, please move the second sentence of the <223> response (begins with "Correspond") to the second line of the <223> response. Per 1.823 of the Sequence Rules, the maximum number of characters per line is 72 (includes white spaces).

<210> 1

<211> 1689

<212> DNA

<213> chicken

Please give the Genus species for the "<213> chicken" response above.

Same error in subsequent sequences.

<222>

(23)..(23)

```
<210>
      8
<211>
      31
<212>
     PRT
<213>
     Homo sapiens
<220>
<221> MISC_FEATURE
<222> (1)..(31)
<223>
     hnRNP Al is defined as a human hnRNP core protein.
<220>
<221> MISC_FEATURE
<222>
     (1)..(6)
<223>
     Correspond to amino acids 16 - 21 of hnRNP A1.
<220>
<221> MISC_FEATURE
<222> (7)..(7)
<223>
      Xaa corresponds to amino acids 22 - 54 of hnRNP A1.
<220>
<221> MISC_FEATURE
<222> (8)..(15)
<223>
     Correspond to amino acids 55 - 62 of hnRNP A1.
<220>
<221> MISC_FEATURE
<222> (16)..(16)
<223>
      Xaa corresponds to amino acids 63 - 106 of hnRNP A1.
<220>
<221> MISC FEATURE
<222>
     (17)..(22)
      Correspond to amino acids 107 - 112 of hnRNP A1.
<223>
<220>
<221> MISC_FEATURE
```

<223> Xaa corresponds to amino acids 113 - 145 of hnRNP A1.

The explantions for the Xaa's at locations 17,16,23 are invalid. An Xaa can only represent a single amino acid: please show the maximum number of positions, and explain that some may be missing. Also, please explain "hnRNP A1." Same error in Sequence 9.

Validated By CRFValidator v 1.0.2

Application No: 09849967 Version No: 5.0

Input Set:

Output Set:

Started: 2007-06-22 19:34:48.713 **Finished:** 2007-06-22 19:34:48.969

Elapsed: 0 hr(s) 0 min(s) 0 sec(s) 256 ms

Total Warnings: 0
Total Errors: 1

No. of SeqIDs Defined: 4

Actual SeqID Count: 10

Error code Error Description

E 252 Calc# of Seq. differs from actual; 4 seqIds defined; count=10

SEQUENCE LISTING

```
<110> New York Medical College
<120> Splice Choice Antagonists as Therapeutic Agents
<130> 51230-00601
<140> 09849967
<141> 2001-05-08
<150>
      09/849,967
<151>
      2001-05-08
<160> 4
<170> PatentIn version 3.3
<210> 1
<211> 1689
<212> DNA
<213> chicken
<220>
<221> misc_feature
<222> (1)..(1689)
<223> Full length cDNA sequence of chicken hnRNP A1.
<220>
<221> misc_feature
<222> (141)..(1276)
<223> Open reading frame of cDNA sequence from chicken hnRNP A1.
<400> 1
gegtetecae eceteagegg geggeggtga gtgegeeagg ecagegeegg egtgggaeeg
agcgggcgtg aaggcgcgag ctgaacgctg gcacggtttc ctagatctaa aagaaaggcc
                                                                    120
gagttagagt acccttccaa aatggctgct attaaggaag agagagaggt ggaagattac
                                                                    180
aagagaaaaa ggaagacgat cagcacaggc catgagccta aggagccaga gcagttgaga
                                                                    240
aagctgttca ttggaggtct gagcttcgag acgacggatg atagcttgag agagcacttt
                                                                    300
                                                                    360
gaaaaatggg gcacactcac ggactgtgtg gtgatgagag acccacaaac aaaacgttcc
agaggettig gettigtiae tiactetige giggaagagg iggalgegge caigageget
                                                                    420
                                                                    480
cgaccacata aggtggatgg acgtgtggtt gaaccaaaga gagcagtttc aagggaggat
tctgtaaagc ctggggcgca tctcacagta aagaaaatat ttgttggtgg cattaaagaa
                                                                    540
                                                                    600
gatacagaag aatataattt aagggggtac tttgaaacat atggcaagat cgaaacgata
gaagtcatgg aagacagaca aagtggaaag aaaagaggct tcgcttttgt aacttttgat
                                                                    660
```

gatcacgata cagttgataa aattgttgtt cagaaatacc atactataaa tggtcataac 720 tgcgaagata aaaaagcact ctcaaaacaa gagatgcaga ctgccagctc tcagagaggt 780 cqtqqqqqtq qttcaqqcaa cttcatqqqt cqtqqaaatt ttqqaqqtqq tqqaqqaaac 840 tttggccgag gaggaaactt tggtggaaga ggaggctatg ggggtggtgg tggcggtggt 900 gggagcagag gaagctttgg gggtggtgat ggatacaacg gatttggtga tggtggcaac 960 1020 tatggaggtg gtcctggcta tggcagcaga gggggttatg gtggtggtgg aggaccagga tatggaaacc caggtggtgg atatggaggt ggaggaggag gatatggtgg ctacaatgaa 1080 qqaqqcaatt ttqqaqqtqq taattatqqa qqcaqtqqaa actacaatqa ctttqqtaac 1140 tacagtggac agcagcagtc caattacggt cccatgaaag gtggtggcag ttttggtggt 1200 agaagttcag gcagtcccta tggtggtggt tatggatctg gaagtggaag tgggggctat 1260 ggtggtagaa gattctaaaa atgctaccag aaaaagggct acagttctta gcaggagaga 1320 gagcgaggag ttgtcaggaa agctgcagtt tactttgaga cagtcgtccc aaatgcatta 1380 gaggaactgt aaaatctgcc acagaaggaa cgatgatcca tagtcagaaa agttactgca 1500 gcttaaacag gaaacccttc ttgttcagga ctgtcatagc cacagtttgc aaaaagagca gctattggtt aatgcaatgt agtgtcgtta gatgtacatc ctgaggtctt tatctgttgt 1560 agctttgtct ttcttttttc tttttatttt cccattacat caggtatatt gccctgtaaa ttgtggtagt ggtacaagga ataaacaaat taaggaattt ttggcttttc aaaaaaaaa 1680 aaaaaaaa 1689

<210> 2

<211> 378

<212> PRT

<213> Chicken

<220>

<221> PEPTIDE

<222> (1)..(378)

<223> Amino acid sequence of chicken hnRNP A1

<400> 2

Met Ala Ala Ile Lys Glu Glu Arg Glu Val Glu Asp Tyr Lys Arg Lys

1 10 15

Arg Lys Thr Ile Ser Thr Gly His Glu Pro Lys Glu Pro Glu Gln Leu
20 25 30

Arg Lys Leu 35	ı Phe Ile	Gly Gly	Leu Ser 40	Phe Glu	Thr Thi	Asp As	sp Ser
Leu Arg Glu 50	ı Gln Phe	Glu Lys 55	Trp Gly	Thr Leu	Thr Asp	o Cys Va	al Val
Met Arg Asp 65	o Pro Gln	Thr Lys	Arg Ser	Arg Gly 75	Phe Gly	Phe Va	al Thr 80
Tyr Ala Thi	r Val Glu 85	Glu Val	Asp Ala	Ala Met 90	Ser Ala	a Arg Pi	
Lys Val Asp	o Gly Arg	Val Val	Glu Pro 105		Ala Val	Ser An	rg Glu
Asp Ser Val	-	Gly Ala	His Leu 120	Thr Val	Lys Lys		ne Val
Gly Gly Ile	e Lys Glu	Asp Thr	Glu Glu	Tyr Asn	Leu Aro	g Gly Ty	yr Phe
Glu Thr Ty	f Gly Lys	Ile Glu 150	Thr Ile	Glu Val 155	Met Glu	ı Asp Aı	rg Gln 160
Ser Gly Lys	s Lys Arg 165	_	Ala Phe	Val Thr 170	Phe Asp	-	is Asp 75
Thr Val Asp	180		185	_		190	
Asn Cys Glu	5	_	200	_	205	5	
Ser Ser Glr 210		215			220		
Gly Asn Phe		230		235			240
Gly Gly Aro	g Gly Gly 245		GIy Gly	Gly Gly 250	GTA GJ	=	er Arg 55

260 265 270 Asn Tyr Gly Gly Pro Gly Tyr Gly Ser Arg Gly Gly Tyr Gly Gly 275 280 285 Gly Gly Gly Pro Gly Tyr Gly Asn Pro Gly Gly Gly Tyr Gly Gly Gly 290 295 300 Gly Gly Tyr Gly Gly Tyr Asn Glu Gly Gly Asn Phe Gly Gly Gly 310 315 Asn Tyr Gly Gly Ser Gly Asn Tyr Asn Asp Phe Gly Asn Tyr Ser Gly 325 330 335 Gln Gln Ser Asn Tyr Gly Pro Met Lys Gly Gly Ser Phe Gly 340 345 Gly Arg Ser Ser Gly Ser Pro Tyr Gly Gly Gly Tyr Gly Ser Gly Ser 355 360 365 Gly Ser Gly Gly Tyr Gly Gly Arg Arg Phe 370 375 <210> 3 <211> 320 <212> PRT <213> Homo sapiens <220> <221> PEPTIDE <222> (1)..(320) <223> Amino acid sequence of human hnRNP A1 <400> 3 Met Ser Lys Ser Glu Ser Pro Lys Glu Pro Glu Gln Leu Arg Lys Leu 10 1 5 15 Phe Ile Gly Gly Leu Ser Phe Glu Thr Thr Asp Glu Ser Leu Arg Ser 20 25 30

His Phe Glu Gln Trp Gly Thr Leu Thr Asp Cys Val Val Met Arg Asp

45

35 40

Gly Ser Phe Gly Gly Gly Asp Gly Tyr Asn Gly Phe Gly Asp Gly Gly

Pro	Asn 50	Thr	Lys	Arg	Ser	Arg 55	Gly	Phe	Gly	Phe	Val 60	Thr	Tyr	Ala	Thr
Val 65	Glu	Glu	Val	Asp	Ala 70	Ala	Met	Asn	Ala	Arg 75	Pro	His	Lys	Val	Asp 80
Gly	Arg	Val	Val	Glu 85	Pro	Lys	Arg	Ala	Val 90	Ser	Arg	Glu	Asp	Ser 95	Gln
Arg	Pro	Gly	Ala 100	His	Leu	Thr	Val	Lys 105	Lys	Ile	Phe	Val	Gly 110	Gly	Ile
Lys	Glu	Asp 115	Thr	Glu	Glu	His	His 120	Leu	Arg	Asp	Tyr	Phe 125	Glu	Gln	Tyr
Gly	Lys 130	Ile	Glu	Val	Ile	Glu 135	Ile	Met	Thr	Asp	Arg 140	Gly	Ser	Gly	Lys
Lys 145	Arg	Gly	Phe	Ala	Phe 150	Val	Thr	Phe	Asp	Asp 155	His	Asp	Ser	Val	Asp 160
Lys	Ile	Val	Ile	Gln 165	Lys	Tyr	His	Thr	Val 170	Asn	Gly	His	Asn	Cys 175	Glu
Val	Arg	Lys	Ala 180	Leu	Ser	Lys	Gln	Glu 185	Met	Ala	Ser	Ala	Ser 190	Ser	Ser
	Arg	195					200					205			
	Phe 210					215					220				
225	Gly				230					235					240
	Asp			245					250					255	
Gly	Gly	Ser	Tyr 260	Asn	Asp	Phe	Gly	Asn 265	Tyr	Asn	Asn	Gln	Ser 270	Ser	Asn

Phe Gly Pro Met Lys Gly Gly Asn Phe Gly Gly Arg Ser Ser Gly Pro

275 280 285

Tyr Gly Gly Gly Gln Tyr Phe Ala Lys Pro Arg Asn Gln Gly Gly
290 295 300

Tyr Gly Gly Ser Ser Ser Ser Ser Tyr Gly Ser Gly Arg Arg Phe 305 310 315

<210> 4

<211> 1136

<212> DNA

<213> Chicken

<220>

<221> misc_feature

<222> (1)..(1136)

<223> Open reading frame of cDNA for chicken hnRNP A1

aatggctgct attaaggaag agagagaggt ggaagattac aagagaaaaa ggaagacgat

60

<400> 4

120 cagcacaggc catgagccta aggagccaga gcagttgaga aagctgttca ttggaggtct 180 gagettegag acgaeggatg atagettgag agageaettt gaaaaatggg geacaeteae ggactgtgtg gtgatgagag acccacaaac aaaacgttcc agaggctttg gctttgttac 240 ttactcttgc gtggaagagg tggatgcggc catgagcgct cgaccacata aggtggatgg 300 360 acgtgtggtt gaaccaaaga gagcagtttc aagggaggat tctgtaaagc ctggggcgca tctcacagta aagaaaatat ttgttggtgg cattaaagaa gatacagaag aatataattt 480 aagggggtac tttgaaacat atggcaagat cgaaacgata gaagtcatgg aagacagaca aagtggaaag aaaagaggct tcgcttttgt aacttttgat gatcacgata cagttgataa 540 aattgttgtt cagaaatacc atactataaa tggtcataac tgcgaagata aaaaagcact 600 ctcaaaacaa gagatgcaga ctgccagctc tcagagaggt cgtgggggtg gttcaggcaa 660 cttcatgggt cgtggaaatt ttggaggtgg tggaggaaac tttggccgag gaggaaactt 720 tggtggaaga ggaggctatg ggggtggtgg tggcggtggt gggagcagag gaagctttgg 780 840 gggtggtgat ggatacaacg gatttggtga tggtggcaac tatggaggtg gtcctggcta 900 tggcagcaga gggggttatg gtggtggtgg aggaccagga tatggaaacc caggtggtgg 960 atatggaggt ggaggaggag gatatggtgg ctacaatgaa ggaggcaatt ttggaggtgg 1020 taattatgga ggcagtggaa actacaatga ctttggtaac tacagtggac agcagcagtc

```
caattacggt cccatgaaag gtggtggcag ttttggtggt agaagttcag gcagtcccta
                                                                 1080
tggtggtggt tatggatctg gaagtggaag tggggggctat ggtggtagaa gattct
                                                             1136
<210> 5
<211> 10
<212> RNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (1)..(10)
<223> Exonic splice silencer (ESS) nucleic acid sequence for hnRNP A1
<400> 5
                                                                    10
uagggcaggc
<210> 6
<211> 10
<212> RNA
<213> Chicken
<220>
<221> misc_feature
<222> (1)..(10)
<223> Exonic splice silencer (ESS) nucleic acid sequence for hnRNP A1
<400> 6
uagggagggc
                                                                    10
<210> 7
<211> 8
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (1)..(1)
<223> Xaa represents a Lysine or an Arginine
<220>
<221> SITE
<222> (3)..(3)
<223> Xaa represents a phenylalanine or tyrosine
<220>
<221> SITE
<222> (4)..(4)
<223> Xaa represents a glycine or alanine
```

```
<220>
<221> misc_feature
<222> (7)..(7)
<223> Xaa can be any naturally occurring amino acid
<220>
<221> SITE
<222> (8)..(8)
<223> Xaa represents a phenylalanine or tyrosine
<400> 7
Xaa Gly Xaa Xaa Pro Val Xaa Xaa
<210> 8
<211> 31
<212> PRT
<213> Homo sapiens
<220>
<221> MISC_FEATURE
<222> (1)..(31)
<223> hnRNP A1 is defined as a human hnRNP core protein.
<220>
<221> MISC_FEATURE
<222> (1)..(6)
<223> Correspond to amino acids 16 - 21 of hnRNP A1.
<220>
<221> MISC_FEATURE
<222> (7)..(7)
<223> Xaa corresponds to amino acids 22 - 54 of hnRNP A1.
<220>
<221> MISC_FEATURE
<222> (8)..(15)
<223> Correspond to amino acids 55 - 62 of hnRNP A1.
<220>
<221> MISC_FEATURE
<222> (16)..(16)
<223> Xaa corresponds to amino acids 63 - 106 of hnRNP A1.
<220>
<221> MISC_FEATURE
<222> (17)..(22)
<223> Correspond to amino acids 107 - 112 of hnRNP A1.
<220>
<221> MISC_FEATURE
<222> (23)..(23)
<223> Xaa corresponds to amino acids 113 - 145 of hnRNP A1.
```

```
<220>
<221> MISC_FEATURE
<222> (24)..(31)
<223> Correspond to amino acids 146 - 153 of hnRNP A1.
<400> 8
Leu Phe Ile Gly Gly Leu Xaa Arg Gly Phe Gly Phe Val Thr Tyr Xaa
               5
                                   10
Ile Phe Val Gly Gly Ile Xaa Arg Gly Phe Ala Phe Val Thr Phe
                               25
           20
<210> 9
<211> 31
<212> PRT
<213> Homo sapiens
<220>
<221> MISC_FEATURE
<222> (1)..(31)
<223> hnRNP A2 is defined as a human hnRNP core protein.
<220>
<221> MISC_FEATURE
<222> (1)..(6)
<223> Correspond to amino acids 11 - 16 of hnRNP A2.
<220>
<221> MISC_FEATURE
<222> (7)..(7)
<223> Xaa corresponds to amino acids 17 - 49 of hnRNP A2.
<220>
<221> MISC_FEATURE
<222> (8)..(15)
<223> Correspond to amino acids 50 -57 of hnRNP A2.
<220>
<221> MISC_FEATURE
<222> (16)..(16)
<223> Xaa corresponds to amino acids 58 - 101 of hnRNP A2.
<220>
<221> MISC_FEATURE
<222> (17)..(22)
<223> Correspond to amino acids 102 -107 of hnRNP A2.
<220>
<221> MISC_FEATURE
<222> (23)..(23)
<223> Xaa corresponds to amino acids 108 - 140 of hnRNP A2.
```

```
<220>
<221> MISC_FEATURE
<222> (24)..(31)
<223> Correspond to amino acids 141 - 148 of hnRNP A2.
<400> 9
Leu Phe Ile Gly Gly Leu Xaa Arg Gly Phe Gly Phe Val Thr Phe Xaa
Leu Phe Val Gly Gly Ile Xaa Arg Gly Phe Gly Phe Val Thr Phe
           20
                25
<210> 10
<211> 12
<212> PRT
<213> Homo sapiens
<220>
<221> MISC_FEATURE
<222> (1)..(12)
<223> hnRNP B1 is defined as a human hnRNP core protein.
      Correspond to amino acids 3 - 14 of hnRNP B2.
<400> 10
Lys Thr Leu Glu Thr Val Pro Leu Glu Arg Lys Lys
                                 10
```